



CITY OF CARDIFF EDUCATION COMMITTEE.

ANNUAL REPORT

FOR 1925

OF THE

SCHOOL MEDICAL OFFICER.

CARDIFF :

F. HODGE AND CO., GLADSTONE STREET.

1926.



*With the Compliments of the
Medical Officer of Health
and School Medical Officer.*

*City Hall,
Cardiff.*



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PREFACE.

The year 1925 has been marked by rapid development of the school medical and ancillary services.

New Clinic Premises.—The scheme outlined in my last Report has been put into effect and is now almost completed, new central premises having been secured at 50, Park Place, and a district clinic opened at Castlefield House, Gabalfa. The latter was formally opened by Mr. Chamberlain, Minister of Health, on 21st October, 1925. Difficulty in finding suitable premises has delayed the establishment of a district clinic for Canton and Ely, but the acquisition of the two clinics now opened has enabled the Department, under somewhat cramped conditions, to carry out the extension of the special and dental clinics which was urgently required, and to inaugurate an orthopædic clinic. The work of these clinics is incomparably more efficient as the result of the new arrangements.

Special Schools.—The Oral School proceeds satisfactorily along well-established lines.

The School for the Blind, under the energetic supervision of the new head teacher, Miss Wilson, has made great strides in spite of obstacles associated with the effort to develop teaching of the partially blind in hopelessly inadequate quarters. At the end of the year, 16 children required to be taught as totally blind (although not all these were in fact totally blind) and 9 were being taught as partially blind. Negotiations are now taking place which will result, it is hoped, in the provision of a School for the Blind which will be worthy of this city.

The Special Day School for mental defectives at Virgil Street has undergone a notable change. Formerly the low grade of child referred to this school had produced a depressing atmosphere inimical to progress. In March, 1924, the children on the register were carefully re-examined and all but 3 were transferred to the Mental Deficiency Authority, their places being taken by high grade defectives who were genuinely educable. At 31st December, 1925, the number of such children on the register had risen to 84. During the year the staff of the school was altered and increased by the appointment of young and keen assistant teachers. The result has been very satisfactory. With these changes, it became increasingly obvious, and a matter of concern to the Committee, that the accommodation at Virgil Street was inadequate and unsuitable. Appended hereto are two reports on the subject of 3rd June and 20th November, 1925, following upon which the Committee, with the approval of the City Council and the provisional sanction of the Board, have practically completed negotiations for the purchase of a house and about 8 acres of land with the object of erecting there day schools for mentally and physically defective children.

The need for accommodation for the latter group of children is even more urgent than for the mental defectives, and has been fully dealt with in previous Annual Reports. The position at the end of the year is discussed in the above-mentioned report of 20th November and needs no further elaboration. It is hoped that residential accommodation may ultimately be found for 25-30 physical defectives in the house referred to above, and that the new buildings, separately arranged but under common administration, will provide for 250 physically defective and 150 mentally defective children. Unfortunately, the commencement which it was intended to make during 1926 has had to be postponed in compliance with the Board's restriction of expenditure for the financial year 1926-7.

Modern Measures for the Prevention of Infectious Diseases.—An outbreak of diphtheria, small but alarming because of its unusual fatality, in one of the schools toward the end of the year and recurring early in 1926, was the occasion for consideration by the Committee of the adoption of active immunisation of school children against this disease. The circumstances are set out in a circular to parents reproduced in the section of this Report which deals with infectious diseases (page 17). The response has been remarkably good, but it is important to appreciate that the right time for taking such measures is not in the midst of an outbreak but in advance of it. The epidemiological signs point to an increase of diphtheria and scarlet fever in the near future, but there is perhaps time yet to reduce the ravages of the former if immunisation can be adopted on a sufficiently extensive scale.

Stammering.—Included in this Report (page 16) is a list of the children attending various schools in the city who have been ascertained by the medical staff to be stammerers. This problem has been receiving the attention of certain members of the staff from the purely medical standpoint, and interesting results of their enquiries are expected. Its main importance, however, lies in the hindrance it presents to education and the grave handicap it places on children seeking employment when they leave school. The Juvenile Employment Officer finds about ten or a dozen such boys on a list consisting of about 600 children, and states that their condition is so pronounced as to interfere gravely with their prospects. Experience in other places indicates that a great deal can be done for stammerers by relatively brief periods of special education.

Medical Work of the Department.—Attention is directed to special notes in the body of the Report by Drs. Sheasby, Coulthard, Roberts and Betenson, and by Mr. Sugden, of the Joint Laboratory. These are some slight evidence of the quality of the work which the medical staff are doing. In addition, Dr. Betenson has devoted a considerable amount of time to an anthropometric enquiry which has been carried on into 1926, and will form, it is hoped, the subject of a special report in the records of the work of that year. It cannot be too strongly emphasised that the real value to the community of a department such as this depends mainly on the standard of work attained by its few technical officers.

Co-operation with Teachers.—Nothing is more striking than the increasing interest of the teachers in the physical well-being of the children, in problems of hygiene falling within the province of education, and in the medical aspects of mental deficiency and backwardness. It is hoped that, having passed through a year of rapid development associated with numerous changes in the staff, the Department will soon be in a better position to respond to the requests for assistance received in growing numbers from the members of the teaching profession. It is a pleasure to record with gratitude the assistance and facilities afforded by them to the officers of this Department in the course of their work.

RALPH M. F. FICKEN,

School Medical Officer.

City Hall,
Cardiff,
April, 1926.

CHANGES IN THE STAFF.

The following changes took place during the year :—

Resignations.—

Name.	Appointment.	Date of relinquishing duty.	Remarks.
Dr. H. L. Coulthard.	Assistant Medical Officer.	30th Sept.	Place taken by Dr. C. J. McSweeney (see below).
Miss P. K. Martin.	School Nurse.	12th June.	Place taken by Miss Constance Morgan (see below).

Appointments.—

Name.	Appointment.	Date of commencing duty	Remarks.
Dr. W. F. W. Betenson.	Assistant Medical Officer.	11th July.	New appointment.
Dr. T. E. Roberts.	ditto.	8th August.	ditto.
Dr. C. J. McSweeney.	ditto.	5th Oct.	In place of Dr. Coulthard (see above).
Major S. Alwyn Smith.	Orthopædic Surgeon.	30th Nov.	New appointment.
Mr. D. J. Andrews.	Assistant School Dentist.	4th May.	ditto.
Mr. F. Lake.	ditto.	1st July.	ditto.
Miss P. K. Martin.	School Nurse	16th April.	New appointment (resigned-see above).
Miss Constance Morgan.	ditto.	15th June.	In place of Miss Martin.
Miss G. M. Evans.	Orthopædic Nurse	18th May.	New appointment (half-time School Medical Service).
Mrs. W. E. Partington.	Dental Clerk-attendant	23rd March.	New appointment.
Miss K. Donovan.	ditto.	16th April.	ditto.
Miss A. D. Brown.	ditto.	22nd June.	ditto.
Miss M. Roberts.	Shorthand-typist.	23rd March.	ditto.
Miss A. Aitken.	Clerk.	4th May.	ditto.

CO-ORDINATION.

There is nothing to add under this head to what has been said in previous Reports. Co-ordination with the other health services is effective and complete.

SCHOOL HYGIENE.

Fairly full records are now in existence as to the sanitary state and structural suitability of most of the schools. Minor defects are notified for remedy as occasion arises.

MEDICAL INSPECTION.

The work of inspection during the year is shown in tabular form in Appendix I, Table I.

The total number of elementary school children examined was 9,970, as compared with 9,922 in 1924, while 2,250 were examined in secondary and high schools, as against 930 in 1924.

In addition to routine inspections, special examinations were made at the instance of the medical officers, teachers, attendance officers, parents or otherwise, at the clinics or in schools, in the case of 3,797 children, as compared with 3,481 in 1924. In addition, 2,420 children were re-examined during the year, as compared with 3,165 last year, while the actual number of re-examinations made was 4,988, as against 5,238 in 1924.

FINDINGS OF MEDICAL INSPECTION.

Details of the defects requiring treatment or observation which were found at routine and special inspections are set out in Appendix I, Table II. Of the 16,017 children (routine and special) examined, 3,806, or 23.8 per cent., were found suffering from one or more defects requiring treatment (excluding uncleanliness and dental diseases). The number and percentage of instances in which certain diseases or defects were referred for treatment or observation are shown in the following table :—

	Defects.	Percentage.
Malnutrition	95	0.6
Uncleanliness	157	1.0
Skin Diseases	754	4.7
Defective Vision and Squint	1,146	7.1
External and other Eye Diseases	166	1.0
Otitis Media	187	1.2
Other Ear Diseases	160	1.0
Enlarged Tonsils only	878	5.5
Adenoids only	91	0.6
Enlarged Tonsils and Adenoids	183	1.1
Other Nose and Throat Defects	89	0.5
Enlarged Cervical Glands	48	0.3
Defective Speech	2	0.01
Dental Diseases (found by Medical Officers)	1,218	7.6
Heart Disease	129	0.8
Anæmia	79	0.5
Lung Diseases—Non-Tuberculous	245	1.5
Tuberculosis (All Forms, including suspects)	32	0.2
Nervous Diseases	30	0.2
Deformities	86	0.5
Other Defects and Diseases	190	1.2

As usual the proportion of children showing defects of one kind or another varies little in comparison with previous years, although there is a pronounced fall in skin diseases from 7.3 per cent. last year to 4.7 per cent. this year. This figure fluctuates a good deal from year to year.

Enlargement of the Thyroid Gland.—Records continue to be kept of the state of the thyroid gland in children approaching the age of puberty. Among the children who had attained the age of 12 years at the commencement of 1925 and who were examined during the year, 109 were found to have enlargement of the gland (39 boys and 70 girls). Placed against the numbers examined (3,927, comprising 2,668 boys and 1,259 girls), this gives a percentage incidence of 2.78 (1.46 per cent. of boys and 5.55 of girls). The proportion of boys affected is a little higher than last year and of girls lower.

The following notes by Dr. Sheasby and Mr. Sugden, M.Sc., F.I.C. (the latter of the Joint Laboratory) have a bearing on this subject :—

URINARY INDICAN IN SIMPLE GOITRE.

The examination of the urinary indican in the following series of cases was undertaken to see whether there exists in the simple goitre of school children any excess of this product in the urine.

It has been pointed out by D. J. Harries* that diffuse parenchymatous goitre is characterised by an excess of indican in the urine, suggesting an excessive destruction of tryptophane in the intestine with a consequent diminution of this amino-acid circulating in the blood.

Prof. Kendall† has shown that thyroxin, the chief active principle of the thyroid secretion, is a derivative of tryptophane, and it is assumed that in goitre the gland enlarges in an endeavour to compensate for the loss of circulating tryptophane from which to elaborate thyroxin.

* *British Medical Journal*, March 31, 1923.

† *Trans. Assoc. Amer. Phys.*, 1915, 30,420.

Col. McCarrison has shown that simple goitre can be cured by measures directed to the alteration of the intestinal flora by antiseptics or by the provision of a pure water supply. The curative effect of iodine in some countries is now well established.

Observations made on a series of cases at the Cardiff school clinics showed that equally good results can be obtained in early simple goitre by treatment with intestinal antiseptics as with iodine compounds.

The distribution of cases of simple goitre in Cardiff do not lend support to iodine deficiency alone as the cause. A striking feature is the way in which it runs in families, grandparents, parents and other members being affected. This family grouping may be due to—

- (1) Idiosyncrasy.
- (2) Peculiarities of the intestinal flora.
- (3) Diet, i.e., excess of fats.

Deficiency of iodine *per se* is probably not the cause, as other families living under similar conditions and consuming similar foodstuffs and the same water do not suffer from goitre.

Procedure.—The urines of the 24 cases examined were from children seen for the first time. The procedure was to collect the sample of urine at the time of examination and immediately send it to the laboratory for analysis. This was done to obviate, as much as possible, the loss of the indican-forming substance, as it has been shown by R.V. Stanford* that in some urines this rapidly disappears. The 12 urines from normal children were dealt with in the same way.

The method of estimation of the urinary indican gives only relative figures, according to a colorimetric scale consisting of a series of multiples of a unit quantity of Fehling's solution.

Ten cubic centimetres of the urine, previously treated with basic lead acetate and filtered, were mixed with an equal volume of pure strong hydrochloric acid and extracted with chloroform. Hydrogen peroxide (10 vols) was cautiously added drop by drop to give maximum development of colour. The intensity of blue colour was then matched colorimetrically against a standard test on an arbitrary scale. The figures are therefore merely approximate, but they serve for purposes of comparison, and may be regarded as some measure of the urinary indican present.

The following list shows the results of analyses of the urines in 24 goitrous and 12 normal children :—

Case No.	Age.	Condition.	Indoxyl.	Skatoxyl.
	Yrs.			
1	11	Simple parenchymatous ; tendency to exophthalmic goitre.	Nil.	Small amount.
2	12½	Simple parenchymatous goitre ; moderate.	1.0	Fair amount.
3	8	Small parenchymatous goitre. ...	3.0	Well marked.
4	12	Large parenchymatous goitre with slight tremor.	5.0	Well marked
5	18	Very small central goitre. ...	Practically nil.	Fair amount
6	13	Small goitre. Eats little meat. ...	2.5	Fair amount.
7	13	Small parenchymatous goitre. ...	7.0	Large amount.
8	6	Exophthalmic goitre. ...	1.5	Fair amount.
9	13	Parenchymatous goitre. ...	9.0	Large amount.
10	9	Simple goitre. ...	2.0	Small amount.
11	12½	Parenchymatous goitre. ...	Trace only.	Fair amount.
12	12	Parenchymatous goitre. ...	2.5	Fair amount.
13	14	Parenchymatous goitre. ...	Nil.	Nil.
14	13	Parenchymatous goitre with exophthalmic symptoms.	Nil.	Nil.
15	13	Moderate parenchymatous goitre	8.0	Large amount.

* *Zeit. f. physiol. Chem.* Vol. 87, pp. 188-206 (1923)

Case No.	Age.	Condition.	Indoxyl.	Skatoxyl.
16	5½	Parenchymatous goitre with exophthalmic symptoms.	Nil	Nil
17	12½	Moderate parenchymatous goitre.	7.0	Considerable amount
18	11¾	Small parenchymatous goitre.	7.0	Considerable amount
19	5½	Bronchocele parenchymatous goitre.	1.0	Traces.
20	10	Parenchymatous goitre.	4.0	Fair amount.
21	13	Parenchymatous goitre.	1.5	Considerable amount.
22	13	Parenchymatous goitre.	5.0	Considerable amount.
23	12	Parenchymatous goitre.	6.0	Considerable amount.
24	12	Parenchymatous goitre.	Practically nil.	Practically nil.
25	6	Normal	8.0	Large amount.
26	11	Normal.	2.0	Small amount.
27	4	Normal.	4.0	Fair amount.
28	9	Normal.	20.0	Large amount
29	9	Normal.	22.5	Large amount.
30	9	Normal.	Nil.	Nil.
31	17	Normal; slight constipation	18.0	Considerable amount.
32	16	Normal.	0.5	Practically nil.
33	9	Normal.	5.0	Small amount.
34	9	Normal.	8.0	Fair amount.
35	11	Normal.	0.5	Small amount.
36	10	Normal.	8.0	Considerable amount.

Later it was decided to do a further series of cases, making six analyses at intervals of one week from an early morning sample of urine. Owing to pressure of routine work and the difficulty in getting the samples of urine, only three cases were dealt with, two being goitrous children and one normal. The results are shown in tabular form below :—

Case No.	Age.	Condition.	No. of Sample.	Indoxyl.
37	10	Simple Goitre.	1	8.0
			2	8.0
			3	4.5
			4	3.0
			5	1.0
			6	2.0
38	12	Simple goitre.	1	2.0
			2	16.0
			3	18.0
			4	2.5
			5	30.0
39	12	Normal.	1	12.0
			2	1.8
			3	1.5
			4	Practically nil.
			5	12.0
			6	0.5

Conclusion.—Although the method of procedure cannot be regarded as a crucial experiment, the results point to the fact that excess of indican in the urine is not a feature in children with simple goitre as compared with normal children.

In the same connection the following notes by Mr. Sugden are of interest :—

IODINE CONTENT OF CARDIFF WATER.

In recent years the iodine content of a water supply has become of some scientific interest, and several estimations of iodine in the Cardiff water supply have been made during the year. With such faint traces as are present, very large volumes of water have to be used and only approximate figures can be given.

The results obtained indicate that the Cardiff water supply has a relatively low iodine content, ranging from 0.1 to 0.2 parts per 1,000 millions.

Very little data giving the iodine content of British water supplies are at present available for comparison and correlation with the extent of endemic or simple goitre amongst the consumers.

In the United States of America much more extensive investigations have been made and the water supplies are grouped in two divisions :—

- (a) Low iodine content, less than 0.25 parts per 1,000 millions.
- (b) High iodine content, ranging from 0.25 to more than 10 parts per 1,000 millions.

The percentage of cases of endemic goitre in America would appear to be much higher in districts where the amount of iodine in the water supply is small. As a prophylactic measure, the occasional addition of iodine salts to the water supply has therefore been adopted, as for example at Rochester, N.Y.

Although the curative method of treatment for goitrous affections by means of iodine salts has been long established, this "communal treatment" for thyroid enlargement as a preventive measure is a matter upon which medical opinion is divided.

Iodine is a normal constituent of the thyroid gland, and the cause of simple goitre is understood to be due to a deficiency of iodine in this gland. To what extent the diseased condition is primarily due to a deficiency of iodine in the food, water, and accessories consumed, or to toxic factors in the individual, which have disturbed the normal gland secretion, is still undecided.

Defects among Entrants.—The table on page 8, and the more detailed returns in Appendix I, Table II, A, refer to children in all groups. Table II, B, of Appendix I, shows the proportion of children entering school who required treatment, and a special table (II.C) is again included showing those who required treatment or observation for defects of various kinds. The proportion of entrants found at routine examinations who suffered from such defects as required immediate treatment (exclusive of uncleanness, pediculosis and dental diseases) amounted to 10.3 per cent., as compared with 13.7 last year, while the percentage is increased to 20.8 if defects requiring either treatment or observation are taken into consideration. This latter figure compares with 26.4 per cent. last year. Nearly a third of the defects recorded were affections of the nose and throat, of which the majority were enlarged tonsils and adenoids. The proportion of defective entrants has fallen roughly by a third in two years.

RE-INSPECTION OF CHILDREN FOUND DEFECTIVE.

During 1925 a survey was made by the medical staff of cases in certain categories referred for treatment or observation during 1924. The total number of children overtaken in this survey was 961, showing 985 defects (see Appendix I, Table VI). Such defects as malnutrition, uncleanness and infectious skin diseases, which are continuously under supervision because of exclusion from school, and dental diseases, regarding which fairly full knowledge is obtained through the clinic organisation, were omitted from this enquiry. A large number of the children previously found defective had left school or were absent at the time of re-inspection.

Of the 961 children re-inspected 437, or almost one half, had not received any treatment, this number including some cases of such a serious nature as heart disease, anæmia, lung diseases, deformities, and even tuberculosis. The state of the defects on re-inspection, classified according to whether or not they had received treatment, may be shown as follows :—

				Percentage.		
				Cured or improved.	Not improved.	Totals.
					Worse	
Treated at School Clinic	..	..	95.3	4.7	—	100
Treated Elsewhere	..	..	84.7	14.4	0.8	100
Not Treated	..	..	18.5	81.0	0.5	100
All Cases	..	..	60.0	39.7	0.3	100

The slightly higher proportion treated this year is reflected in a slight increase in the percentage of all cases which showed improvement on re-examination, 60.0 per cent. falling into this category, as compared with 55.7 per cent. last year.

PHYSICALLY DEFECTIVE CHILDREN.

The number of children known to be physically defective is recorded in Appendix I (Table III). During the year the problem raised by such children has been further under the consideration of the Special Schools Committee, as mentioned in the preface to this Report and elaborated in Appendix III.

MENTALLY DEFECTIVE CHILDREN.

During 1924 the class of child admitted to the Special Day School was completely altered, and the effect is shown by the increased number on the register, there being 84 at the end of 1925, as compared with 44 in 1924.

The numbers of children of special school age known to be mentally defective at 31st December, 1925, whether under the Education Authority or Mental Deficiency Authority were as follow :—

			Education Authority Cases.		Mental Deficiency Authority Cases.		Totals.
Classification.			Attending Special School.	Not at School.	In Institutions or under Guardianship	Under Supervision at Home.	
Feeble-minded	..	..	84	17*	8	9	118
Imbeciles	..	..	—	—	19	41	60
Idiots	..	..	—	—	7	16	23
Totals	..	..	84	17	34	66	201

The activity of ascertainment may be gathered from the fact that the known defectives of school age increased from 74 in 1923 to 147 in 1924 and 201 this year.

During the year 98 children were specially examined for suspected mental deficiency. Of these, 31 were regarded as not defective, 44 were certified as feeble-minded and suitable for education in a special school, while 23 were passed on to the Mental Deficiency Committee. The last group consisted of 7 feeble-minded children, 12 imbeciles and 4 idiots.

BLIND CHILDREN.

The numbers of blind and partially blind children are given in Appendix I, Table III. The question of accommodation for them is dealt with in the preface.

* Absent pending arrangements for admission to the Special School or because of illness or physical defect.

The following notes on children attending and who have attended, the School for the Blind have been prepared by Dr. Sheasby :—

In these notes the term "totally blind" is applied to children without any perception of light, "blind" to children with perception of light but unable to find their way about unaided, and "partially blind" to children capable of doing work which requires some degree of vision.

The tables below have been drawn up to show the type of visual defect found in the School for the Blind. The cases have been divided into three groups—preventable, non-preventable and accidental.

Of 29 children attending the school during 1925, 13 were suffering from defects which were theoretically preventable, 12 congenital and non-preventable, and 4 were due to accidents. The number in the non-preventable group represents the minimum for whom accommodation is likely to be required at any one time.

Ophthalmia neonatorum accounted for six of the cases, four of whom were under 11 years of age, and therefore contracted the disease in the period since it became notifiable in 1914. Since notification began, 480 cases have been notified in Cardiff, and out of this number one became totally blind, one child had both eyes seriously damaged, and nine children each had one eye only damaged. The fact that a larger number of cases of blindness than were discovered through notification actually found their way to the School for the Blind is no doubt due to incomplete notification in the war years immediately succeeding the coming into operation of the notification regulations.

A similar table is included showing the origin of blindness in 26 cases that are known to have attended the school but have now left. The high proportion of these who were partially blind (13, or exactly one half) is evidence in justification of the arrangements now made for special instruction of such children in classes separate from the blind and totally blind.

Children attending School for the Blind.

Case. No.	Age. Years.	Vision.	Acquired.	Congenital.	Preventable.	Non-preventable.	Accidental.
1	11	Partial.	Corneal nebulae (phlyctenular keratitis).	Myopia.	+	—	—
2	10	Partial.			—	+	—
3	15	Partial.	Corneal nebulae (phlyctenular keratitis).		+	—	—
4	16	Totally blind.	Disorganised globes.		—	—	+
5	8	Totally blind.	Ophthalmia neonatorum.		+	—	—
6	16	Blind.	Ophthalmia neonatorum.		+	—	—
7	12	Blind.		Dislocation of lens.	—	+	—
8	9	Blind.		Dislocation of lens.	—	+	—
9	9	Totally blind.	Ophthalmia neonatorum.		+	—	—
10	10	Blind.		Cataract.	—	+	—
11	10	Blind.		Coloboma of iris and choroid.	—	+	—
12	10	Blind.	Leucoma adhærens		+	—	—
13	9	Blind.	Ophthalmia neonatorum.		+	—	—
14	15	Totally blind.	Ophthalmia neonatorum.		+	—	—
15	10	Partial.		Myopia.	—	+	—
16	10	Partial.		Coloboma.	—	+	—
17	13	Blind.	Loss of right eye. Leucoma adhærens left eye.		—	—	+
18	12	Partial.		Myopia.	—	+	—
19	5	Totally blind.	Disorganised globes (measles and ophthalmia neonatorum).		+	—	—
20	10	Totally blind.	Ophthalmia neonatorum.		+	—	—

Case. No.	Age.	Vision.	Acquired.	Congenital.	Prevent-able.	Non-pre-ventable.	Accident-al.
	Years.						
21	14	Totally blind.		Cataract.	—	+	—
22	13	Blind.		Nystagmus.	—	+	—
23	13	Totally blind.	Traumatic cataract.		—	—	+
24	13	Blind.		Coloboma.	—	+	—
25	12	Blind.	Corneal nebulae (accident).		—	—	—
26	14	Partial.		Interstitial keratitis.	+	—	—
27	5	Partial.	Corneal nebulae (measles).		+	—	—
28	8	Partial.	Corneal nebulae (?ophthalmia neonatorum).		+	—	—
29	6	Blind.		Congenital dislocation of lens.	—	+	—

Cases that have left the School for the Blind.

Case No.	Year of Birth.	Vision.	Acquired.	Congenital.	Prevent-able.	Non-prevent-able.	Accident-al.
1	1903	Blind.		Cataract.	—	+	—
2	1902	Totally blind.	Optic atrophy.		—	+	—
3	1908	Partial.		Myopia.	—	+	—
4	1905	Totally blind.		Nystagmus.	—	+	—
5	1906	Blind.		Buphthalmos.	—	+	—
6	1907	Blind.		Spina bifida (optic atrophy).	—	+	—
7	1906	Blind.		Coloboma iris	—	+	—
8	1905	Blind.		Cataract	—	+	—
9	1913	Blind.	Ophthalmia neonatorum.		+	—	—
10	1905	Totally blind.	Cataracts.		+	—	—
11	1905	Blind.		Buphthalmos.	—	+	—
12	1905	Partial.	Interstitial keratitis.		+	—	—
13	1905	Partial.	Ophthalmia neonatorum		+	—	—
14	1900	Partial.	Interstitial keratitis.		+	—	—
15	1900	Blind.		Cataract.	—	+	—
16	1903	Blind.	Ophthalmia neonatorum.		+	—	—
17	1902	Blind.		Cataract.	—	+	—
18	1907	Partial.		Nystagmus.	—	+	—
19	1908	Partial.		Post-polar cataract.	—	+	—
20	1914	Partial.	Nebulae (phlyctenular conjunctivitis)		+	—	—
21	1908	Partial.	Nebulae (ophthalmia neonatorum).		+	—	—
22	1908	Partial.	Nebulae (phlyctenular conjunctivitis).		+	—	—
23	1901	Partial.	Growth of jaw proptosis.		—	+	—
24	1909	Partial.	Nebulae (ophthalmia neonatorum).		+	—	—
25	1905	Partial.	Post-staphyloma iritis.		—	+	—
26	1908	Partial.	Corneal opacities (phlyctenular conjunctivitis).		+	—	—

ROUTINE INSPECTION OF CHILDREN IN SPECIAL SCHOOLS.

				Boys.	Girls.	Totals.
Special School for Mentally Defective Children	..			45	26	71
Oral School for Deaf Children	..	..	..	15	17	32
School for Blind Children	..	..	..	18	6	24
Totals				78	49	127

Disease or Defect.	Number.
Uncleanliness	3
Skin Disease	1
Defective Vision	8
External Eye Disease	3
Defective Hearing	1
Otitis Media	4
Enlarged Tonsils only	1
Enlarged Tonsils and Adenoids	1
Defective Teeth	3
	—
Total	25

STAMMERERS.

The following table includes all children who have been reported to this Department as stammerers, and whose condition has been verified by the medical staff :—

School.	Boys.	Girls.	Infants.		Totals.
			Boys.	Girls.	
Albany Road C.	7	—	—	—	7
Allensbank C.	5	—	1	1	7
Court Road C.	3	—	—	—	3
Eleanor Street C.	1	—	—	—	1
Ely C.	4	—	1	—	5
Gladstone C.	2	—	—	—	2
Grangetown C.	4	—	—	—	4
Lansdowne Road C.	1	2	—	—	3
Llandaff C.	4	1	—	—	5
Maindy C.	8	—	—	—	8
Marlborough Road C.	4	—	—	—	4
Moorland Road C.	9	—	1	—	10
Ninian Park C.	—	1	—	1	2
Radnor Road C.	—	2	—	—	2
Roath Park C.	2	—	—	—	2
South Church Street C.	3	2	—	—	5
Splotlands C.	8	—	—	—	8
Stacey Road C.	4	—	—	—	4
Wood Street C.	8	3	—	—	11
Canton N.	—	2	—	—	2
Cathays N.	1	3	—	—	4
Grangetown N.	1	—	—	—	1
Llandaff N.	1	—	—	—	1
Metal Street N.	1	—	—	—	1
St. John's N.	—	1	—	—	1
St. Monica's N.	4	—	—	—	4
Tredegaville N.	5	—	—	—	5
St. Alban's R.C.	3	—	—	—	3
St. David's R.C.	9	—	2	—	11
St. Patrick's R.C.	2	—	1	—	3
St. Peter's R.C.	6	—	—	—	6
Totals	110	17	6	2	135

The fact that certain large schools do not appear in the list suggests that our knowledge of such cases is still very imperfect. The staff are, of course, mainly dependent on the teachers for the discovery of stammerers. As always, the great majority of the cases are boys, and there appears to be a sufficient number of them to justify arrangements for special tuition.

INFECTIOUS DISEASES.

The expected recrudescence of scarlet fever and diphtheria has arrived, 262 cases of the former and 153 of the latter being notified among school children, as against 100 and 91 respectively in 1924. The numbers of school children notified as suffering from various infectious diseases were as follow :—

Scarlet Fever	262
Diphtheria	153
Pneumonia	37
Dysentery	1
Erysipelas	5
Tuberculosis—Respiratory	27
„ Other forms	46

The following cases of non-notifiable infectious diseases were intimated by head teachers or school attendance officers, or were otherwise ascertained :—

Chickenpox	..	..	..	..	303
Measles	..	..	..	..	861
German Measles	..	..	..	..	35
Whooping Cough	..	..	..	..	335
Mumps	..	..	..	..	70

Toward of end of 1924 measles became epidemic, and continued to occur in considerable volume throughout the first three months of 1925. As in the case of scarlet fever and diphtheria, we may look for an increase in this disease for some years.

Diphtheria.—An epidemic of diphtheria of an unusually virulent type occurred in connection with a school during the autumn and recurred at the beginning of 1926. Its main features and the measures taken to deal with it are described briefly in a circular to parents, of which the following is a reproduction :—

Circular to Parents or Guardians.

Dear Sir or Madam,

CITY HALL,
CARDIFF,
17th February, 1926.

DIPHTHERIA.

As you are aware, diphtheria has been prevalent amongst the children attendingSchool during the autumn and late winter of 1925-26. Between 26th August and 23rd October, 1925, eighteen cases of diphtheria sickened, fourteen families being involved. Thereafter, until the end of 1925 only three fresh cases occurred, one of these belonging to a family already infected. The unusual prevalence of the disease therefore appeared to have abated. Unfortunately, soon after the school re-opened on 4th January, fresh cases began to occur, eight patients sickening between the 16th and the 30th of that month. Since then, until the date of writing, only one further case has occurred, in a family already infected.

The alarm caused by the outbreak has probably been due, not so much to the number of cases, as to the severity of the disease. A large proportion of the cases has been accompanied by severe complications, and altogether seven deaths have occurred, which is an unusually high proportion out of thirty cases.

The public are aware of the steps that have been taken to combat the disease, and these need not be further detailed. There is no reason to suspect the school building in any way; it cannot be too strongly emphasised that the diphtheria bacillus does not readily survive away from the human body, and that such circumstances as defective drains or sewers have not the remotest connection with this disease. The Education Committee have decided, however, to take no chances in this matter. The drains have been recently examined and found in good order, and the school has been closed during the current week for cleansing and disinfection of the building, destruction of pens, pencils and paint brushes (these being articles which children are apt to put into their mouths), disinfection of drinking-cups, and fumigation of books and such stationery as it is impracticable to destroy.

The most important procedure has been the search for carriers of infection—that is, persons who are not showing any symptoms of diphtheria but are nevertheless carrying the bacillus in their throats or noses and spreading the disease to others, either by contact, as by kissing, or directly through the air when coughing, sneezing, speaking, singing, whistling and blowing the nose, or indirectly by putting articles in their mouths which may come in contact with other mouths. Altogether twenty-one such carriers so far have been detected in connection with this school and have been excluded. It is important to note that very few of the children who have been kept from school during the days when throats were being swabbed for the detection of carriers have been examined, and that some of them undoubtedly still constitute a danger to other children. The Committee have therefore decided that no such child will be re-admitted without my permission, and I am arranging for their throats to be examined for the bacillus when they return.

In spite of all these measures and any other steps which might conceivably be taken, the history of outbreaks of diphtheria and the impossibility of detecting carriers at all ages give ground for the belief that this severe type of diphtheria is likely to remain more than usually prevalent in the district. Quite probably the epidemic, which has abated since the beginning of this month, will lie dormant for some time and break out again as it did before. In such circumstances it is better to take precautions in advance, and there is one method which has been extensively and successfully used in recent years—the method of rendering the young children insusceptible to the disease by small doses of diphtheria toxin, mixed with the anti-toxin which has been used now for many years with great success in the treatment of the disease.

For this purpose, it is usual to confine our efforts to the children under ten years of age, because it is they who are most susceptible to diphtheria. Deaths rarely occur over that age if the disease is detected within a reasonably short space of time after its onset. A minute dose of toxin is injected first of all *into* the skin of the arm to ascertain if the child is already insusceptible—the Schick Test. If the child is susceptible, a red spot develops on one arm within a few days. Those who show no reaction are regarded as safe from the disease. The others, if the parents desire it, are treated by a small injection *under the skin* of the toxin-antitoxin mixture, already mentioned, on three successive weeks.

The treatment is associated with very little pain in the arm and practically no constitutional disturbance. It must be clearly understood that successful immunisation cannot be guaranteed in every case. Experience shows that a small proportion of failures occurs in every large group of children treated. Insusceptibility, also, is not produced immediately. It is usually delayed for at least two months after treatment, and perhaps for as long as five or six months. The method is therefore recommended in anticipation of further outbreaks, not as a method of bringing the present epidemic to an end.

Enclosed is a form on which you are invited to make application for your children to be immunised. The names of children under school age may also be included if you wish them to be treated. In their case it may be possible to dispense with the Schick Test and so shorten the process.

In the meantime, it is important for parents to realise that the onset of diphtheria is insidious. Some of the worst cases admitted to hospital have been ill for so many days before medical advice has been sought that treatment has been much less effective than it might have been. Under present circumstances any child showing symptoms of illness whether with or without pain in the throat, should be seen by the family doctor at once.

Yours faithfully,

RALPH M. F. PICKEN,

Medical Officer of Health.

The response to the offer of immunising has been very satisfactory and will be recorded in the Report for 1926.

Vaccinal State of the School Population—The table which has been included in previous Reports again appears below, and shows a steadily falling percentage of vaccinated children.

State of Vaccination of 12,218 Children Inspected (Elementary, Secondary and High Schools).

Age—Years.	Vaccinated.	Unvaccinated.	Totals.	Percentage Vaccinated.
3	89	79	168	53.0
4	852	690	1,542	55.2
5	992	768	1,760	56.4
6	293	244	537	54.6
7	208	147	355	58.6
8	531	362	893	59.5
9	1,070	647	1,717	62.3
10	55	14	69	79.7
11	174	76	250	69.6
12	2,030	947	2,977	68.2
13	613	267	880	69.7
14	281	118	399	70.4
15	259	99	358	72.3
16	177	37	214	82.7
17	63	13	76	82.9
18	16	5	21	76.2
19	1	1	2	50.0
Totals.	7,704	4,514	12,218	63.0

"FOLLOWING UP" AND THE WORK OF SCHOOL NURSES.

The number of cases visited by the nurses was 3,877, compared with 3,976 in 1924, and the number of visits made, 5,708, as against 6,023 last year. These were distributed as follow :—

	First Visits.	Revisits.	Totals.
Defects of Vision	762	456	1,218
„ „ Teeth	583	241	824
„ „ Ear, Throat and Nose	727	318	1,045
Other Defects	1,805	816	2,621
Totals ..	3,877	1,831	5,708

Cleanliness Surveys.—The nurses paid 490 special visits to schools, making 57,102 examinations of children for uncleanness, when 1,644 children were found to be harbouring vermin and 3,905 to have nits. Of these, 4,340 were subsequently re-examined, 1,250 having been cleansed in the meantime ; of these, 280 were previously verminous and 508 previously had nits only, while 462 previously verminous were found free from vermin but not free from nits. The percentage of children found verminous at these surveys was 2.9, as compared with 3.8 in each of the three preceding years, but the decline is clearly due to the transference by the nurses of certain children from the verminous group to the category described as having nits.

In addition, the nurses assisted the medical officers and dentists at routine and special examinations at schools and at the clinics, and themselves attended to a large number of children at the clinic premises. The number of children cleansed by the nurses at the Corporation Cleansing Station was 80, and the number of baths given 237.

MEDICAL TREATMENT.

Details of the defects found and the extent to which they received treatment are fully set-out in Appendix I. Tables II and IV. Of 12,892 conditions calling for medical or dental treatment, 6,494, or 50.4 per cent., were ascertained to have been treated either at the school clinics (6,145) or otherwise (349). If dental defects are excluded, the proportion of other defects known to have received proper attention is increased to 75.9 per cent.

The increase of the number of children treated is a result of the scheme of extension of the clinics and staff which began to take effect during the last school term of the year.

Ringworm.—As shown in Appendix I, Table II, A, 255 children were found to be suffering from ringworm, the more troublesome scalp form occurring in 140 cases. By far the majority (242) were treated under the supervision of the medical staff of the Department, 101 by X-rays.

Note by Dr. Roberts on X-ray treatment of Ringworm of the Scalp :—

The X-ray treatment of ringworm, started by Dr. Coulthard and described by him in last year's report, has since his departure been carried on by the writer. The results to the end of February, 1926, are summarised below :—

Number of Cases Treated.

125.

*Average period of exclusion after
X-ray Treatment
30 days*

It must be remembered that after exposure to X-rays the hair does not fall out until 21 days later. Therefore it will be seen that on the average a week after this happened the child was free from infection and back at school. Cases whose parents refuse X-rays and who are treated with ointments are usually absent at least 6 months, and 4 cases have been excluded 18 months and still remain infective. From this the value of X-ray treatment is evident, and in an increasing number of cases the parents now give immediate consent.

As regards X-ray diagnosis and photography, several cases have been presented and radiographs taken ; now that the orthopædic clinic is in working order this branch will develop and become of increasing value.

A start has also been made with dental radiography which will be of use to the dentists in the diagnosis and treatment of their more difficult cases.

Minor Ailments.—A great deal of assistance has been rendered in the treatment of minor ailments by the nurses of the Queen Victoria's Jubilee Institute for Nurses, to whom 77 new cases were referred for treatment, and who paid altogether 3,153 visits to the homes of children in order to administer treatment. Details of the work are given below :—

Disease or defect.	Carried over from 1924.		Referred for Treatment during 1925.		Totals.	
	Cases.	Visits.	Cases.	Visits.	Cases.	Visits.
Skin :—						
Ringworm ..	24	761	11	357	35	1,118
Impetigo ..	6	126	22	381	28	507
Other Skin Diseases ..	3	200	7	188	10	388
Minor Eye Defects ..	4	100	13	455	17	555
Minor Ear Defects ..	—	—	6	229	6	229
Miscellaneous ..	—	—	18	356	18	356
Totals ..	37	1,187	77	1,966	114	3,153

Visual Defects.—The work of the special eye clinics is shown in Appendix I, Table IV, Group II, (a) and (b). Altogether 1,125 children were referred to these clinics, of whom 954 were examined for errors of refraction. Sixty-eight failed to return for completion of examination. Of the remaining 886, glasses were prescribed in the case of 797, and by the end of the year 719 had already obtained them. The high proportion of children obtaining glasses when prescribed is very satisfactory.

The following additional tables amplifying the information given in the prescribed tables (Appendix I) have been prepared by Dr. Sheasby :—

Analysis of Cases treated at Eye Clinic.

			Squint.			Errors of Refraction.				
			1-5 years.	5-10 years.	10-15 years.	Hyper-metropia.	Myopia.	Astigmatism.		
								Hyper-metropic.	Myopic.	Mixed.
Boys ..	..	..	12	74	39	125	52	157	40	22
Girls ..	..	..	9	73	31	143	53	180	44	35
Totals ..	..	..	21	147	70	268	105	337	84	57

Other Diseases of Eye.

			Conjunctivitis.	Phlyctenular Conjunctivitis.	Blepharitis.	Cataract.			Congenital Dislocation of Lens.
						Con-genital.	Capsular.	Traumatic.	
Boys	..	..	18	7	35	1	—	1	—
Girls	..	..	32	21	34	2	—	—	—
Totals		..	50	28	69	3	—	1	—

			Optic Neuritis and Choroiditis	Keratitis.	Nebulæ	Leucoma Adhærens.	Mucocele.	Tubercular Iritis.	Corneal Ulcer.
Boys	..	..	3	9	25	2	—	—	—
Girls	..	..	5	10	39	2	—	—	—
Totals	..	..	8	19	64	4	—	—	—

			Iritis.	Nystagmus.	Persistent Pupillary Membrane.	Dermoid of Conjunctiva.	Meibomian Cyst.	Other Diseases.
Boys	..	..	—	—	—	1	2	3
Girls	..	..	2	—	—	—	—	1
Totals	..	..	2	—	—	1	2	4

Defects of Ear, Nose and Throat.—The children treated at the special clinic suffered mainly from enlarged tonsils or adenoids, or both these conditions. Particulars of operative and other forms of treatment carried out at the clinics are shown in Appendix I, Table IV, Group III, (a) and (b). There has been a notable increase in the number of children dealt with (from 802 in 1924 to 1,175) owing to the additional clinic facilities provided during the year. It is important to estimate from time to time the effect of these operations and accordingly the following note is included here :—

Note by Dr. Coulthard on the Results of Operative Treatment of Enlarged Tonsils and Adenoids.

The systematic record keeping of the end results of operative treatment for enlarged tonsils and adenoids which was commenced in 1923 has been continued since. While notes were taken of all the 398 cases operated upon during 1924, 135 failed to report for re-examination after six months. In consequence the following summary refers only to the remaining 263 children of whom complete notes have been made. As cases which received operative treatment later than June, 1925, were not due to be re-examined until 1926, these figures relate only to the work of the ear, nose and throat clinic for the year 1924.

History of General Health.

		Good.	Fair.	Bad.	Total.
Before operation	...	23	185	55	263
After operation	...	45	193	25	263

History of Specific Complaints.

Complaint.	Before operation.		After operation.	
	Present.	Absent.	Present.	Absent.
Sore Throat—				
Occasional or Slight	46 } 224	29	11 } 15	248
Frequent or Severe	178 }		4 }	
Dysphagia—				
Slight	37 } 166	97	10 } 11	252
Marked	129 }		1 }	
Snoring—				
Occasional	19 } 214	49	21 } 40	223
Marked	195 }		19 }	
Nose-bleeding-Occasional	43	220	12	251
Colds—				
Occasional	15 } 241	22	80 } 112	151
Frequent	226 }		32 }	
Coughs—				
Slight	36 } 119	114	37 } 54	209
Frequent	113 }		17 }	
Earache—				
Slight	20 } 112	151	17 } 35	228
Severe	92 }		18 }	

Physical Conditions observed before and after Operation.

Defects.	Before operation.		After operation.	
	Present.	Absent.	Present.	Absent.
Tonsils—				
Much enlarged ...	129	8	0	11
Moderately „ ...	89		1	
Slightly „ ...	37		10	
Adenoids—				
Much enlarged ...	16	66	0	5
Moderately „ ...	78		0	
Slightly „ ...	103		5	
Post-nasal Discharge ...	193	70	55	208
Mouth Breather—				
Marked ...	163	45	20	78
Slight ...	55		58	
Nasal Speech— ...				
Marked ...	160	67	23	76
Slight ...	36		53	
Adenitis— ...				
Palpable or Enlarged ...	208	55	151	112
Otitis Media-Recent ...	57	206	25	238
Deafness—				
Marked ...	58	162	10	27
Slight ...	43		17	

Mental State before and after Operation.

	Before operation.	After operation.
Mentality—		
Bright or Average	181	185
Dull or Backward	82	78

It will be seen that by removal of tonsils and adenoids great relief was afforded from sore throats (93 per cent.), earaches (69 per cent.) and coughs (63 per cent.), frequent causes of absenteeism from school.

Many mothers commented on the improvement in the nature of their children's sleep following operation. Whereas before treatment they were inclined to snore (214 cases) and frequently toss restlessly in their sleep, after removal of the tonsils and adenoids freedom from these disturbing symptoms followed in 81 per cent. of the cases. Similarly, comment was frequently made on the improved appetite of the children, of whom 166 before operation were troublesome with their meals. Subsequent to operations in only 11 cases did the children persist in "picking" at their food, or experience difficulty in the deglutition of solids.

It is interesting to note the close approximation of the figures relating to nasal speech and mouth breathing. It must be admitted that the end results could be improved upon, but as in previous years the difficulty has been to obtain co-operation of the parents in the home in checking faulty habits and in encouraging correct breathing.

Consequent on the diminished incidence and severity of catarrh after operative treatment, in the majority of cases hearing has been improved, and as noted in a previous report approximately 60 per cent. of the cases of otorrhœa in school children clear up soon after removal of tonsils and adenoids, often with no other local treatment.

The grading of the mental state of the children under review has admittedly been arbitrary but for practical purposes is satisfactory. It has been assumed that the average child reaches Standard 1 at the age 7-8 years; an additional year is allowed for each successive standard. Children have been graded bright who were a year or more ahead of their age-standard group, and backward if a year or more behind the norm. The table shows little change in the mental grading of these 263 cases, though 7 of 19 cases originally classified dull were no longer so graded when seen six months after their operations. Improved hearing through freedom from colds possibly accounted for their increased alertness.

For some time much has been written in the annals of medicine on a new method of treatment of otorrhœa by zinc ionisation. As our older methods were only satisfactory according to the thoroughness of the treatment given by parents or district nurses, it was thought desirable to try the new method. The following note deals with the first 37 cases treated :—

Note by Dr. Roberts on the Treatment of Otorrhœa by Zinc Ionisation :—

Chronic suppurative otitis media, characterised by a muco-purulent discharge from the ear, is probably the most refractory to treatment of all the minor ailments with which school medical officers have to deal.

Many parents regard the condition as a trivial one, but such is by no means the case; for if the discharge persist for months or years a progressive and permanent degree of deafness results, and at any time a mastoid or a cerebral abscess may supervene with serious danger to life. The removal by operation of adenoids and unhealthy tonsils is of great value, both as regards prevention and cure of infection of the middle ear, but there still remains a number of cases which resist all ordinary methods of treatment.

Accordingly when an electrical machine (Pantostat) was supplied for the use of the orthopædic department, it was decided to use it also for zinc ionisation treatment, and on 14th November, 1925, it was started.

The method is as follows :—The ear is thoroughly cleansed and dried out. With the child lying down, the ear is filled with a weak solution of zinc sulphate and an ebonite speculum containing a rod of metallic zinc introduced. This is attached to the positive pole of the machine and a moistened pad fixed on the arm to the negative side. A weak galvanic current of about 2 milliamperes is then passed for 10 minutes, causing the zinc sulphate to split up and deposit minute particles of ionic zinc on the lining surface of those parts of the ear with which the solution is in contact, thereby producing an antiseptic and astringent effect.

Results of cases treated to 31st December, 1925 :—

Ears treated	...	...	37
All discharge ceased	...	...	13
Much improved	...	...	12
No change	...	...	12

As a general rule the cases which show no permanent improvement are those where the discharge is of long duration, e.g., up to 10 years; in most of these there is probably carious bone present which requires operative treatment.

Crippling Defects and Orthopædics.—The number of non-tuberculous cripples in attendance at elementary schools at the end of 1925 was 234, while 20 others were prevented from attendance at school because of their defect. No cripples were in attendance at or resident in a special school for this type of children.

The new orthopædic clinic was opened for cases on 3rd November, 1925, and is already working at full pressure. From the date mentioned to the end of the year 98 school children were examined. Of these, 9 were recommended for hospital treatment, 12 for appliances, and 28 for treatment (electricity, massage and/or exercise) at the clinic. Seventeen children were actually treated at the clinic, and altogether the attendances totalled 169.

Dr. Betenson's note printed below deals with those cases which appeared in the records of the Department on 31st December, 1925, and about whom definite information was available. It must be clearly understood that the clinic exists both for school children and for those under school age, and that the Education Authority is responsible only for those included in the column of the table showing the numbers at ages 5-16 years, i.e., the age-period covering elementary and special school children. The number of cases known to this Department at higher ages is, of course, only a trifling percentage of all cripples above school age.

Note by Dr. Betenson on the Work of the Orthopædic Clinic :—

The crippled children known to the Department at 31st December, 1925, about whom definite information was available are classified in the following table :—

Cause of Crippling.	Under 5 years.	5-16 years.	Over 16 years.	Totals.
Poliomyelitis ...	54	86	5	145
Other Palsy ...	10	36	—	46
Congenital Malformations ...	25	25	1	51
Trauma ...	—	7	5	12
Rickets ...	32	9	—	41
Tuberculosis (non-active)* ...	—	19	3	22
Other Causes ...	9	41	4	54
Totals ...	130	223	18	371

In regard to the cases cited above a few remarks may perhaps enable us to realise the enormity of the problem which lies before us.

It will be observed that of the 371 cases, 191, or 51.5 per cent. of the whole, are cases of paralysis of some form. By far the majority of these are cases having one limb so affected that though the children are able to attend school, they cannot hope to leave school otherwise than in a crippled state. There are also, unfortunately, several cases who, though able to attend school, will on leaving never be fit for anything but sedentary occupation.

With regard to the remainder of the cases, particularly congenital malformations and rickets, thanks to our child welfare centres, the cases are being discovered early and treatment taken in hand at once. This should mean that by the time the child comes of school age it should not be necessary for more than a little school time to be lost in coming for treatment, and except in a few cases, the prospects of being able to leave school physically fit are good.

It is important, however, to realise that for all the above cases of school age to be treated at all adequately and with any prospects of advantage, operation in some form is invariably found necessary with attendance at the clinic for at least two or three half-days a week for several months. The consequent loss to the child's education is therefore considerable.

DENTAL INSPECTION AND TREATMENT.

The work of the school dentists is summarised in Appendix I, Table IV, Group IV. One dentist only was engaged during the early part of 1925. Two additional dentists were appointed during the year, and they commenced duty in May and July respectively. The new cases treated have increased from 1,728 to 3,271, and the cases retreated from 1,218 to 1,347. Altogether there has been an increase of 1,672 in the number of children treated.

PROVISION OF MEALS.

The arrangements continued throughout the year on the same lines as formerly. The following statement of the meals given during the years 1921-5, has been kindly supplied by the Superintendent School Attendance Officer :—

	No. of Canteens.	No. of Meals Supplied.	Average Weekly No. of Meals.	Average Weekly No. of Children fed.
1921 ..	13	594,411	11,655	1,148
1922 ..	12	182,094	3,501	434
1923 ..	8	35,700	686	144
1924 ..	7	27,378	526	110
1925 ..	7	52,960	1,018	169

*Active tuberculosis falls within the province of the Welsh National Memorial Association.

PHYSICAL EDUCATION.

Report of Miss Maud M. Brown, Chief Organiser of Physical Education, on Physical Education in the Elementary Schools.

I beg to submit the following report on the work in the City of Cardiff Elementary Schools during 1925 :—

One hundred and sixty-seven visits have been paid to girls', mixed and infants' departments, baths, playing fields and parks. Forty-six classes were taken at the Pupil Teachers' Centre. Thirty-six teachers' training classes have been held, and one hundred and twenty-one sessions given to the work of organisation.

Miss Perry, His Majesty's Inspector, visited the following schools during the year :— Allensbank C. Girls', Crwys Road C. Girls', Llandaff C. Mixed, Hawthorn C. Mixed, Moorland Road C. Girls', Ninian Park C. Girls', Severn Road C. Girls', Wood Street C. Girls', St. John's Nat. Girls', St. Alban's R.C. Mixed, St. David's R.C. Girls', also the Infant Teachers' Training Class at Howard Gardens.

The amount of time given to the work of physical education is inadequate. Physical education is a branch of preventive medicine, and the health of the public and of the individual is a matter of universal concern. It is therefore of immediate concern that the condition of fitness should be extended and become part of the system of daily education, and that all children should take part in this daily lesson.

The Board of Education Syllabus of Physical Training, 1919, provides material for the seven years normally spent in the upper departments of the public primary schools, and it is important that the work as set out for each standard, should be thoroughly taught in that standard, to ensure progression of work all through the school. The use of the uniform commands of this syllabus will materially assist the progression.

The work of those teachers who keep up to date by attending courses in physical training arranged by the Education Committee shows great improvement. These teachers are to be congratulated on the good results attained, and for their interest in the welfare of the children under their charge.

The Board of Education pamphlet on the "Team System" has been supplied to all boys', girls' and mixed departments of the primary schools.

The proposed extension of the Board of Education Syllabus of Physical Training for elder girls was given a trial in Allensbank C. Girls' School. Miss M. S. Warman, Trained Assistant Teacher, gave an hour daily (out of school time) to this work for two terms. This effort met with much appreciation from parents, who showed it in a practical way by providing suitable shoes and clothes, and by allowing the girls to stay an extra hour a day at school. An open evening was held in the play-ground on July 22nd; a number of interested fathers and mothers made a most appreciative audience, and all agreed that Miss Warman and the children were to be congratulated on the good results. The easy posture, the alertness and quick response of the girls were very clear proofs of the educative value of daily physical exercise.

It is hoped this work will be carried on in the continuation classes in the Cardiff schools, bearing in mind the fact that the physical education of girls after ordinary school age requires skilful handling and rather more specialised knowledge, and must be undertaken by teachers who are specially interested and have had opportunities for extending their training in the subject.

Teachers' Training Classes.—The following classes have been held. Two courses for Infants' School Teachers on the Board of Education Syllabus of Physical Exercises for Children under Seven Years of Age, 1919. Two courses for Upper School Teachers (one in organised games), by kind permission of the Commanding Officer, at the Barracks Field, and one on the Board of Education Syllabus of Physical Training, 1919. The number of entries for these courses continues to be satisfactory, being a total of 183 for the four courses.

Howard Gardens Gymnasium, where the teachers' classes are held, has been much improved by the addition of eight electric lamps, by the removal of the old gas brackets and pipes, and pieces of old apparatus which have been out of use for many years.

Playing Fields and Parks.—Mr. Pettigrew, Chief Officer of Parks, gives every possible help (and we are grateful to him for the facilities given) for use of playing pitches for organised games. Full advantage cannot be taken of these facilities owing to the pitches often being under water. We continue to enjoy the privilege of using Sophia Gardens Field and the Barracks Field.

Organised Games.—In some schools the organised games have considerably improved, a number of girls are becoming really agile and athletic, and are able to throw and catch a ball with some skill. A rounders competition was played during the summer and early autumn, fourteen schools entering for the competition.

The result was as follows:

<i>First Round.</i>				
St. John's Nat. Girls'	Won 128 pts.	v Adamsdown C. Girls'	85 pts.	
Grangetown Nat. Mixed	„ 230 „	v Hawthorn C. Mixed	20 „	
Crwys Road C. Girls'	„ 181 „	v Tredegarville Nat. Girls'	83 „	
Canton Nat. Girls'	„ 132 „	v Eleanor St. C. Mixed	57 „	
St. Peter's R.C. Girls'	„ 99 „	v Llandaff C. Mixed	47 „	
Kitchener Rd. C. Girls'	„ 112 „	v Ninian Park C. Girls'	49 „	
Lansdowne Rd. C. Girls'	„ 61 „	v Allensbank C. Girls'	40 „	

<i>Second Round.</i>				
St. Peter's R.C. Girls'	Bye.			
Grangetown Nat. Mixed	Won 133 pts.	v Crwys Road C. Girls'	59 pts.	
St. John's Nat. Girls'	„ 36 „	v Canton Nat. Girls'	27 „	
Lansdowne Rd. C. Girls'	„ 91 „	v Kitchener Rd. C. Girls'	83 „	

<i>Semi Final (two innings).</i>				
Grangetown Nat. Mixed	Won 170 pts.	v St. Peter's R.C. Girls'	67 pts.	
Lansdowne Rd. C. Girls'	„ 150 „	v St. John's Nat. Girls'	124 „	

<i>Final (two innings).</i>				
Lansdowne Rd. C. Girls'	Won	Grangetown Nat. Mixed	withdrew.	

Lansdowne Road School girls are to be congratulated on being the winners; they have qualified as holders of a picture presented by the Chief Organiser of Physical Education.

A demonstration rounders match was played on Sophia Gardens Field on Saturday, September 26th, when about 100 children and teachers watched the game. Miss Perry, His Majesty's Inspector, Dr. Picken, Miss Long, Miss Young, and Miss Tovey were present. Miss Rogers, Organiser of Physical Training for Glamorgan, very kindly umpired the match.

Sports.—It is pleasing to note that those girls who had the advantage of special daily lessons in physical training at Allensbank C. Girls' School did well in the different events at the schools athletic sports, which points to the training value of daily regulated physical training.

Swimming.—Though still behind the standard of most large towns in this subject, Cardiff has made some headway, and more children are taking an active interest in it. The first annual girls' swimming gala was held on Monday, September 28th, at the Corporation Baths, Guildford Crescent. Owing to lack of accommodation spectators were unable to be admitted. There was an encouraging entry of 556, which necessitated preliminary heats being competed for on September 25th. No individual prizes were given, the winners of the events gaining points for their school. St. Davids' R.C. Girls' School gained the highest number of points (45) and qualified to be the holders of a picture for one year. The picture was very kindly presented by the Lord Mayor (Alderman W. H. Pethybridge). Allensbank C. Girls' School were the "runners up" with 43 points. Miss Perry, His Majesty's Inspector, Dr. Picken, Professor Olive Wheeler, Miss Kinghorn and Miss Long were present. The officials at the Gala were:—

Judges.—Miss Rogers, Miss E. K. Green and Mr. Evans.

Starter.—Miss Maud Brown.

Recorders.—Misses I. M. Bracher, E. Nesbitt and E. M. Pierson.

The "class teaching" of swimming is advocated by the Amateur Swimming Association, and it is recommended that each girls' and mixed school should be supplied with a copy of the Handbook of the Amateur Swimming Association (price 1/-).

Pupil Teachers' Centre.—An open evening was held on May 12th, when Councillor Purnell kindly took the chair, and was supported on the platform by Dr. Picken and Miss James. The programme consisted of an exhibition of needlework and a physical training lesson by seniors and juniors. A number of organised games were played, team races run, and a captain ball match played (Seniors v Juniors).

A part-time post (3 hours a week) as Instructress of Physical Training at the Pupil Teachers' Centre was made in July, the duties to begin in the Autumn Term. Miss E. Nesbitt was appointed to the post.

Folk Dancing.—Two children's country dance parties have been held, one on May 9th at the Drill Hall, Dumfries Place, when between 600 to 700 children took part, and one out of doors at Bronwydd, Penylan, on July 18th, by kind permission of Lord Pontypridd, when about 300 children were present.

Welfare Work.—A lecture, drawing attention to the value of physical exercise for girls who have left school, was given under the auspices of the Cardiff Juvenile Welfare Council on May 27th, when Cardiff teachers, University training students and pupil teachers demonstrated points of the lecture with various activities.

EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

During the year 13 boys and girls were examined at the clinics at the request of the Juvenile Employment (Education) Officer and medical reports were sent for his guidance in placing these juveniles in work.

The following tables relating to the employment of children of school age and young persons have been kindly furnished by Mr. Ben Williams, Juvenile Employment (Education) Officer :—

TABLE I.

Age of School Children Employed out of School Hours.

	12 years.	13 years.	14 years.	Totals.
Boys	60	218	53	331
Girls	1	8	2	11
Totals ..	61	226	55	342

A child under the age of 12 years cannot now be legally employed.

The approximate number of child employees under old conditions was 2,000. They were from 10 years of age and upwards and worked anything up to 36 hours a week, before, between and after school hours.

TABLE II.

Nature of Employment of School Children Employed out of School Hours.

Nature of Employment.	Boys.	Girls.	Totals.
Assisting in Shops	1	—	1
Delivery of Bread	17	1	18
Delivery of Milk	11	—	11
Domestic Work	—	1	1
Errands	167	—	167
Miscellaneous	135	9	144
Totals ..	331	11	342

The hawking of newspapers is illegal except for boys over the age of 15 years. Boys between 15 and 16 years need a licence for this work.

TABLE III.

Number of Hours of Employment per Week (including Saturday and Sunday)
of School Children Employed out of School Hours.

Number of Hours per Week.		Boys.	Girls.	Totals.
1	..	—	—	—
2	..	—	—	—
3	..	1	—	1
4	..	1	—	1
5	..	27	1	28
6	..	—	—	—
7	..	5	—	5
8	..	—	—	—
9	..	—	—	—
10	..	—	—	—
11	..	2	—	2
12	..	36	3	39
13	..	21	2	23
14	..	21	—	21
15	..	194	5	199
16	..	6	—	6
17	..	17	—	17
Totals		331	11	342

Fifteen hours per week is the maximum number of hours which a child may be employed under the provisions of the Bye-Laws made under the Employment of Children Act, 1903, as amended by the Education Act, 1918, excepting in the delivery of milk and newspapers, where two hours employment is allowed on Sunday mornings, which makes a maximum of 17 hours per week for these two employments.

Entertainments Section.—Cases licensed by the Cardiff Education Committee and examined by the School Medical Officer during the year, 31. Cases visiting Cardiff on license from other areas during the year, 16.

MEDICAL EXAMINATION OF TEACHERS.

All teachers newly appointed under the Education Authority, pupil teachers entering the Training Centre, and other teachers sent for special reasons are examined by the medical staff, and reports are forwarded to the Director of Education on a form specially prepared for the purpose.

During 1925 the numbers examined were :—

			Males.	Females.	Totals.
Pupil Teachers	..	.	3	30	33
Teachers	..	..	15	62	77
Totals	..	..	18	92	110

The actual number of examinations made was 113.

APPENDIX I.

YEAR ENDED 31st DECEMBER, 1925.

TABLE 1.

RETURN OF MEDICAL INSPECTIONS.

A.—ROUTINE MEDICAL INSPECTIONS.

	Elementary Schools.			Secondary and High Schools.		
	Boys.	Girls.	Totals.	Boys.	Girls.	Totals.
Entrants	2,104	2,056	4,160	—	—	—
Intermediates	1,357	1,235	2,592	—	—	—
Leavers	1,512	1,483	2,995	—	—	—
Other Routine Inspections	97	126	223	1,358	892	2,250
Totals ..	5,070	4,900	9,970	1,358	892	2,250

B.—SPECIAL INSPECTIONS.

				Elementary Schools.			Secondary and High Schools.		
				Boys.	Girls.	Totals.	Boys.	Girls.	Totals.
Special Inspections.	At School .. ..	..	..	441	529	970	—	35	35
	At School Clinic .. ..	..	..	1,257	1,521	2,778	10	4	14
Totals				1,698	2,050	3,748	10	39	49
Re-inspections.	At School .. ..	..	..	512	482	994	—	—	—
	At School Clinic .. ..	..	..	1,883	2,082	3,965	20	9	29
Totals				2,395	2,564	4,959	20	9	29

TABLE II.

A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION.

DISEASE OR DEFECT.	ROUTINE INSPECTIONS.				SPECIAL INSPECTIONS.			
	Elementary Schools.		Secondary and High Schools.		Elementary Schools.		Secondary and High Schools.	
	Requiring Treatment.	To be kept under Observation.	Requiring Treatment.	To be kept under Observation.	Requiring Treatment.	To be kept under Observation.	Requiring Treatment.	To be kept under Observation.
Malnutrition	28	45	8	...	13	1	...	...
Uncleanliness	148	1	2	...	6	...	...	...
Skin :—								
Ringworm :—								
Scalp	7	...	1	...	132	...	...	...
Body	6	...	...	...	108	...	1	...
Scabies	15	...	1	...	82	...	...	...
Impetigo	36	...	1	...	364	...	...	...
Other Diseases(Non-Tuberculous)	20	2	2	...	127	...	...	...
Eye :—								
Blepharitis	35	...	3	...	65	1	1	...
Conjunctivitis	4	...	...	...	27	...	...	...
Keratitis .. ..	...	...	...	...	2	...	...	...
Corneal Opacities	1	...	...	...	...	...	...	...
Defective Vision (excluding Squint)	488	11	151	...	334	6	1	...
Squint	70	1	1	...	83	...	...	...
Other Conditions	5	...	3	...	18	...	1	...
Ear :—								
Defective Hearing	63	3	20	...	51	...	...	...
Otitis Media	80	...	5	...	100	2	...	...
Other Ear Diseases	11	...	2	...	10	...	...	...

TABLE II. A—continued.

DISEASE OR DEFECT.	ROUTINE INSPECTIONS.				SPECIAL INSPECTIONS.			
	Elementary Schools.		Secondary and High Schools.		Elementary Schools.		Secondary and High Schools.	
	Requiring Treatment.	To be kept under Observation.	Requiring Treatment.	To be kept under Observation.	Requiring Treatment.	To be kept under Observation.	Requiring Treatment.	To be kept under Observation.
Nose and Throat :—								
Enlarged Tonsils only ...	503	52	51	11	243	17	1	...
Adenoids only ...	28	8	2	2	48	2	1	...
Enlarged Tonsils & Adenoids ...	52	8	4	1	117	1	...	...
Other Conditions ...	32	11	1	...	38	7	...	...
Enlarged Cervical Glands (Non-Tuberculous) ...	19	19	...	...	9	1	...	...
Defective Speech ...	1	...	...	1	...	...	...	...
Teeth :—								
Dental Diseases ...	811	...	203	...	204	...	...	...
Heart and Circulation :—								
Heart Disease :—								
Organic ...	6	44	4	8	4	15	...	...
Functional ...	1	33	1	8	...	5	...	...
Anæmia ...	30	16	8	4	16	5	...	...
Lungs :—								
Bronchitis ...	10	72	...	...	22	9	...	...
Other Non-Tuberculous Diseases ...	5	87	2	3	10	25	...	...
Tuberculosis :—								
Pulmonary :—								
Definite ...	...	...	...	...	3	...	...	...
Suspected ...	...	...	...	...	9	5	...	...
Non-Pulmonary :—								
Glands ...	...	...	...	...	7	1	...	...
Spine ...	...	1	...	...	1	...	...	...
Hip ...	...	...	...	...	2	...	...	...
Other Bones and Joints ...	...	...	...	...	2	...	...	...
Skin ...	...	...	...	...	...	...	...	...
Other Forms ...	...	...	...	...	1	...	...	...
Nervous System :—								
Epilepsy ...	...	...	...	...	2	5	...	...
Chorea ...	...	2	...	...	11	3	...	...
Other Conditions ...	...	4	...	...	1	2	...	...
Deformities :—								
Rickets ...	5	...	...	1	3	...	...	...
Spinal Curvature ...	1	...	...	...	...	...	...	...
Other Forms ...	21	19	4	5	23	4	...	...
Other Defects and Diseases ...	48	23	14	7	80	18	...	...

B.—NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE AND SPECIAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

	Elementary Schools.			Secondary and High Schools.		
	Number of Children.			Number of Children.		
	Inspected.	Found to require treatment.	Percentage of Children found to require treatment.	Inspected.	Found to require treatment.	Percentage of Children found to require treatment.
Entrants ..	4,160	430	10.3	..	..	..
Intermediates ..	2,592	527	20.3	..	..	..
Leavers ..	2,995	506	16.8	..	..	..
Others ..	223	34	15.2	2,250	273	12.1
Totals ..	9,970	1,497	15.0	2,250	273	12.1
Specials ..	3,748	2,029	54.1	49	7	14.2
Grand totals	13,718	3,526	25.7	2,299	280	12.1

TABLE II. C.

ENTRANTS FOUND SO DEFECTIVE AS TO REQUIRE TREATMENT OR TO BE KEPT UNDER OBSERVATION, SHOWING THE NUMBER OF INSTANCES IN WHICH THEY SUFFERED FROM MORE THAN ONE DISEASE OR DEFECT.

Referred for Treatment or Observation as suffering from (1)	No. of Entrants (2)	NUMBER OF DEFECTS REFERRED FOR TREATMENT OR OBSERVATION											Total No. of Defects (15)	
		Tuberculosis -Pulmonary (3)	Tuberculosis -Non- Pulmonary (4)	Heart (5)	Anæmia (6)	Respiratory -Not Tuberculosis (7)	Vision (8)	Ears (9)	Nose and Throat (10)	Eyes (external and other) (11)	Skin (12)	Teeth (13)		Other Defects (14)
Tuberculosis—Pulmonary ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis—Non-Pulmonary	1	..	1	..	..	..	..	..	..	..	..	..	..	1
Defects of Heart ..	45	..	..	45	..	1	..	..	..	..	1	2	2	49
Anæmia ..	8	..	..	..	8	..	..	..	1	..	1	1	1	11
Respiratory Defects (Not Tuberculosis)	105	..	..	..	..	105	2	..	7	..	11	4	4	129
Defects of Vision ..	48	..	..	..	..	..	48	..	2	..	3	4	4	57
„ Ears ..	26	..	..	..	..	..	..	26	3	..	1	1	1	34
„ Nose and Throat ..	246	..	..	..	..	..	..	..	246	2	5	14	14	308
„ Eyes (external & other)	25	..	..	..	..	..	..	..	..	25	..	3	..	28
„ Skin ..	36	..	..	..	..	..	..	..	..	..	36	2	2	45
„ Teeth ..	206	..	..	..	..	..	..	..	..	..	206	14	14	220
Other Defects ..	118	..	..	..	..	..	..	..	..	..	..	118	118	118
Not requiring Medical Attention	3,296	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTALS ..	4,160	..	1	45	8	106	50	26	259	27	42	276	160	1,000

TABLE III,
RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

			Boys.	Girls.	Totals.
Blind (including partially blind).	(i) Suitable for training in a school or class for the totally blind.	Attending Certified Schools or Classes for the Blind	13	3	16*
		Attending Public Elementary Schools	..	..	..
		At other Institutions .. .. .	..	..	..
		At no School or Institution	3	2	5
	(ii) Suitable for training in a school or class for the partially blind.	Attending Certified Schools or Classes for the Blind	6	3	9
		Attending Public Elementary Schools	19	14	33
		At other Institutions .. .. .	..	..	..
		At no School or Institution .. .. .	..	..	..
Deaf (including deaf and dumb and partially deaf).	(i) Suitable for training in a school or class for the totally deaf or deaf and dumb.	Attending Certified Schools or Classes for the Deaf	9	8	17†
		Attending Public Elementary Schools	..	..	..
		At other Institutions .. .. .	..	..	..
		At no School or Institution	1	..	1
	(ii) Suitable for training in a school or class for the partially deaf.	Attending Certified Schools or Classes for the Deaf .. .. .	..	..	..
		Attending Public Elementary Schools	16	16	32
		At other Institutions .. .. .	..	..	..
		At no School or Institution .. .. .	..	..	..
Mentally Defective.	Feeble-minded (cases not notifiable to the Local Control Authority).	Attending Certified Schools for Mentally Defective Children	53	31	84
		Attending Public Elementary Schools	..	..	..
		At other Institutions .. .. .	..	..	..
		At no School or Institution	10	9	19§
	Notified to the Local Control Authority during the year.	Feeble-minded	7	..	7
		Imbeciles	5	7	12
		Idiots	2	2	4
	Epileptics.	Suffering from severe epilepsy	Attending Certified Special Schools for Epileptics	1	1
In Institutions other than Certified Special Schools .. .. .			..	..	..
Attending Public Elementary Schools			1	1	2
At no School or Institution			2	9	11
Suffering from epilepsy which is not severe		Attending Public Elementary Schools ..	17	5	22
		At no School or Institution .. .. .	..	1	1

* In addition 1 boy not residing in the area is in attendance.

† In addition 5 boys and 5 girls not residing in the area are in attendance.

§ Including 2 boys and 3 girls attending private schools.

TABLE III.—continued.

			Boys.	Girls.	Totals.
Physically Defective.	Infectious pulmonary and glandular tuberculosis.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	2	..	2
		At other Institutions	2	..	2
		At no School or Institution ..	4	6	10
	Non-infectious but active pulmonary and glandular tuberculosis.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board .. ..	..	..	..
		At Certified Residential Open Air Schools .. ..	..	..	..
		At Certified Day Open Air Schools ..	..	..	..
		At Public Elementary Schools ..	21	19	40
		At other Institutions .. ..	..	..	..
		At no School or Institution ..	..	..	..
	Delicate children (<i>e.g.</i> , pre- or latent tuberculosis, mal-nutrition, debility anæmia, etc.).	At Certified Residential Open Air Schools .. ..	..	..	..
		At Certified Day Open Air Schools ..	..	..	..
		At Public Elementary Schools ..	81	79	160
		At other Institutions .. ..	..	..	..
		At no School or Institution ..	22	24	46
	Active non-pulmonary tuberculosis.	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	8	3	11
		At Public Elementary Schools ..	12	11	23
		At other Institutions	1	4	5
		At no School or Institution ..	14	10	24
	Crippled children (other than those with active tuberculous disease) <i>e.g.</i> children suffering from paralysis, &c., and including those with severe heart disease.	At Certified Hospital Schools ..	..	..	..
		At Certified Residential Cripple Schools ..	..	..	..
		At Certified Day Cripple Schools ..	..	..	..
		At Public Elementary Schools ..	170	182	352*
		At other Institutions	4	2	6
		At no School or Institution ..	21	32	53†

*Comprising :—

	Boys.	Girls.	Totals.
Cripples	124	110	234
Severe Heart Disease ..	41	62	103
Chorea	5	10	15

† Comprising :—

	Boys.	Girls.	Totals.
Cripples	9	11	20
Severe Heart Disease ..	7	10	17
Chorea	5	11	16

TABLE IV.

RETURN OF DEFECTS TREATED DURING THE YEAR 1925.

TREATMENT TABLE.

GROUP I.—Minor Ailments (excluding Uncleanliness, for which see Group V.)

Disease or Defect.	Number of Defects Treated or under Treatment during the Year.					
	Elementary Schools.			Secondary and High Schools.		
	Under the Authority's Scheme.	Otherwise.	Totals.	Under the Authority's Scheme.	Otherwise.	Totals.
Skin :—						
Ringworm—Scalp ..	130	2	132	..	..	..
„ Body ..	106	3	109	1	..	1
Scabies	80	5	85	1	..	1
Impetigo	366	..	366	2	..	2
Other Skin Diseases	132	6	138	1	..	1
Minor Eye Defects (External and other but excluding cases falling in Group II)	36	10	46	..	..	..
Minor Ear Defects.	19	1	20	..	..	..
Miscellaneous (e.g., minor injuries bruises, sores, chil- blains, etc.) ..	63	5	68	..	..	..
Totals	932	32	964	5	..	5

GROUP II. (a)—*Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I.).*

	Number of Defects Dealt with.							
	Elementary Schools.				Secondary and High Schools.			
	Under the Authority's Scheme.	Submitted to Refraction by Private Practitioners or at Hospital.	Other-wise.	Totals.	Under the Authority's Scheme.	Submitted to Refraction by Private Practitioners or at Hospital.	Other-wise.	Totals.
Errors of Refraction	796	7	4	807	55	9	5	69
Other Defect or Disease of the Eyes (excluding those recorded in Group I.). ..	131	..	1	132	..	..	1	1
Totals ..	927	7	5	939	55	9	6	70

	Elementary Schools.	Secondary and High Schools.
Number of Children for whom Spectacles were Prescribed :—		
(a) Under the Authority's Scheme ..	748	49
(b) Otherwise	8	12
Number of Children who obtained or received Spectacles :—		
(a) Under the Authority's Scheme ..	683*	36
(b) Otherwise	8	12

* Including 37 at half cost and 96 free of charge.

GROUP II. (b)—Additional Particulars with reference to the Treatment of Visual Defects.

	Elementary Schools.	Secondary and High Schools.
Examined at the Specialist Clinic	1,044	81
(a) Examined for Errors of Refraction .. .	890	64
(1) Examination completed	796	55
(2) For whom glasses were prescribed	748	49
(3) For whom glasses were provided :—		
(a) By parents only under Local Authority's scheme	550	36
(b) With assistance of Local Authority	37	—
(c) Free of charge	96	—
(4) For whom glasses were not prescribed	48	6
(5) Failed to attend for completion of examination	67	1
(6) Other treatment required :—		
(a) Glasses also prescribed—included in (2)	22	—
(b) Not requiring glasses—included in (4)	4	1
(7) Received other treatment	26	1
(8) Old Cases (1924) for whom glasses were provided in 1925—		
(a) By parents only under Local Authority's scheme	15	—
(b) With assistance of Local Authority	2	—
(c) Free of charge	9	—
(b) Examined for Defects other than Errors of Refraction	105	1
(1) For whom treatment was recommended	105	1
(2) Received treatment	105	1
(3) For whom no treatment was considered necessary.	—	—
(c) Number of attendances of Vision Cases at the School Clinic	2,486	134

GROUP III. (a)—Treatment of Defects of Nose and Throat.

	Elementary Schools.	Secondary and High Schools.
At Special School Clinic :—		
Examined	969	14
Received operative treatment	398	7
Received operative and other forms of treatment	127	1
Received other forms of treatment only	246	5
Attendances of nose and throat cases	2,666	33
By Private Practitioners or at Hospital :—		
Received operative treatment	6	—
Received operative and other forms of treatment	—	—
Received other forms of treatment only	11	—

GROUP III. (b)—Treatment of Serious Ear Defects.

	Elementary Schools.	Secondary and High Schools.
At Special School Clinic :—		
Examined	188	4
Received operative treatment	—	—
Received operative and other forms of treatment	—	—
Received other forms of treatment only	168	3
Attendances of serious ear cases	467	5
By Private Practitioners or at Hospital :—		
Received operative treatment	1	—
Received operative and other forms of treatment	—	—
Received other forms of treatment only	3	—

GROUP IV.—Dental Defects.

						Elementary Schools.	Secondary and High Schools.
(1) Number of Children who were :—							
(a) Inspected by the Dentists :							
Aged :							
Routine Age Groups	5	..	..	..	..	1,464	—
	6	..	..	..	..	1,935	—
	7	..	..	..	..	1,567	—
	8	..	..	..	..	1,682	—
	9	..	..	..	..	659	—
	10	..	..	..	..	260	—
	11	..	..	..	..	175	—
	12	..	..	..	..	169	—
	13	..	..	..	..	171	—
	14	..	..	..	..	55	—
Total						8,137	—
Specials						1,538	124
Grand Total						9,675	124
(b) Found to require treatment						7,459	121
(c) Actually treated						3,188	83
(d) Re-treated during the year as the result of periodical examination						1,255	92
(2) Half-days devoted to :—							
Inspection						58	—
Treatment						877	—
Total						935	—*
(3) Attendances made by children for treatment						7,184	285
(4) Fillings :—							
Permanent teeth						1,948	241
Temporary teeth						584	2
Total						2,532	243
(5) Extractions :—							
Permanent teeth						1,462	81
Temporary teeth						10,385	34
Total						11,847	115
(6) Administrations of general anæsthetics for extractions						2,898	58
(7) Other operations :—							
Permanent teeth						364	45
Temporary teeth						65	—
Total						429	45

Treatment of Dental Defects by Private Dentists :—

	Elementary Schools.	Secondary and High Schools.
Children treated	36	78

* Not differentiated.

GROUP V.—Uncleanliness and Verminous Conditions.

Elementary Schools.

(i)	Average number of visits per school made during the year by the school nurses	..	4.4
(ii)	Total number of examinations of children in the schools by school nurses.	..	57,102
(iii)	Number of individual children found unclean :—		
	With vermin	.. .. .	1,644
	With nits only	.. .. .	3,905
			5,549
(iv)	Number of children cleansed under arrangements made by the Local Education Authority :—		
	Previously verminous	.. .. .	280
	Previously with nits only	.. .. .	508
	Previously verminous found to be free from vermin but not free from nits	.. .. .	462
			1,250*

GROUP VI.—Treatment of all other Defects.

Disease or Defect.	Defects treated.		
	By Private Practitioners, at Hospital, or Tuberculosis Dispensary.	Otherwise.	Totals.
Malnutrition	13	46	59
Enlarged Cervical Glands	—	1	1
Heart Diseases	5	—	5
Anæmia	12	22	34
Diseases of Lungs (non-tuberculous)	2	6	8
Pulmonary Tuberculosis	3	—	3
Other forms of Tuberculosis	4	—	4
Diseases of Nervous System	6	3	9
Deformities	8	—	8
Other Diseases and Defects	22	2	24

TABLE V.

AVERAGE HEIGHTS AND WEIGHTS OF CHILDREN INSPECTED.

Elementary Schools.

Age-Years.	Boys.			Girls.		
	Number.	Average Height.	Average Weight.	Number.	Average Height.	Average Weight.
		ins.	lbs.		ins.	lbs.
3	75	38.1	34.9	80	37.3	32.3
4	770	39.0	37.3	759	38.7	35.4
5	879	41.0	39.5	870	40.8	39.5
6	280	42.2	40.5	250	42.9	42.8
7	160	47.0	51.0	193	45.3	47.5
8	460	48.1	53.0	420	47.4	51.0
9	880	49.9	58.7	810	49.6	56.5
12	1,525	54.6	74.2	1,415	56.1	75.8
13	490	54.8	78.9	379	57.3	80.9

*Including cases actually cleansed by the school nurses, cases dealt with at the Corporation Cleansing Station, and cases cleansed by parents on advice given by the nurses.

TABLE VI.

RESULTS OF MEDICAL RE-INSPECTION OF CHILDREN FOUND DURING 1924 TO REQUIRE TREATMENT OR TO BE KEPT UNDER OBSERVATION.

	Treated at School Clinic.			Treated Elsewhere.			Not Treated.			Totals.			Total Number of Defects.
	Cured or Im-proved,	No Im-prove-ment.	Worse	Cured or Im-proved.	No Im-prove-ment,	Worse.	Cured or Im-proved.	No Im-prove-ment.	Worse.	Cured or Im-proved.	No Im-prove-ment.	Worse.	
Eye Diseases ..	169	8	..	2	2	..	5	75	..	176	85	..	261
Ear Diseases ..	46	6	..	2	..	..	7	27	..	55	33	..	88
Diseases of Nose & Throat	152	5	..	6	3	..	58	160	1	216	168	1	385
Enlarged Cervical Glands	7	..	..	2	..	..	1	2	..	10	2	..	12
Defective Speech	..	..	..	..	..	..	..	..	..	..	..	..	..
Heart Diseases	..	..	..	1	1	..	2	17	..	3	18	..	21
Anæmia ..	6	..	..	16	3	..	..	7	..	22	10	..	32
Lung Diseases (Non-Tuberculous)	17	1	..	29	1	..	3	17	1	49	19	1	69
Tuber- culosis { Pulmonary Non-Pulmonary	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	1	..	..	..	1	..	1	1	..	2
Nervous Diseases	..	..	..	2	..	1	..	1	..	2	1	1	4
Deformities ..	1	..	..	6	3	..	..	11	..	7	14	..	21
Other Defects & Diseases	12	..	..	33	4	..	5	36	..	50	40	..	90
Totals ..	410	20	..	100	17	1	81	354	2	591	391	3	985

Total number of children re-inspected: 961.

APPENDIX II.

SPECIAL DAY-SCHOOL FOR MENTALLY DEFECTIVE CHILDREN.

At a meeting of the Special Schools Committee held on 30th April last, I was instructed to report on the provision of a permanent school for mentally defective children. The question is becoming more urgent because of the difficulty in finding suitable quarters even for the temporary accommodation of the children already certified. The number on the register at Virgil Street is now 79, i.e., 29 above the number for which this school was originally intended, and 9 over the average attendance for which the Board are now willing to consider the accommodation adequate. At the present rate of progress the average attendance will definitely exceed the Board's figure by the end of this year.

Accommodation for Ordinary Teaching Purposes.—In providing for these children it is necessary to remember that they are left in the care of the Education Authority (i.e., they are not transferred to the Mental Deficiency Authority) because, in spite of their defect, there is prospect of educating them to be self-supporting if the right means of developing their faculties can be found and applied. In the first place, they are dealt with in smaller classes than normal children, so that they may receive more individual attention. This means that premises with small class rooms are suitable for their education. The equipment and arrangement of these rooms in which the ordinary subjects (English, Arithmetic, etc.) are taught are not essentially different from those in ordinary elementary schools.

Vocational Training.—Many of these children, however, although incapable of developing under the ordinary curriculum of the elementary school, have special aptitudes. Their well-known gift for handling animals is an example, but one for which a diminished scope is offered under modern conditions of life, especially in towns. The objective of the special schools should be to find these faculties and give them opportunity to develop. It means a definite and early vocational bias in the curriculum. In a report of 11th June, 1924, to the Mental Deficiency Committee by Alderman Francis and myself reference was made to a special school "where the instruction in the early days was along good infant-school lines, then according to Montessori methods designed to cultivate manipulation and arouse interest, then moving on to the Dalton system and latterly, as the result of practical experience, the almost complete discarding of curricula in favour of a policy of setting children to tasks of a useful character for whole days on end—such as real practical gardening for boys (not merely the school plot) and actual housework and laundry-work for girls." This, I think, is the direction in which we should move. The tendency for such schools to be modified kindergartens probably accounts for the view held by many competent judges that the day-school is an unsatisfactory means of providing for the education of mental defectives.

School Grounds.—While it is essential that some provision should be made for sending to residential institutions children who are educable but unsuitable for a day school because of mental instability, this procedure is so costly that it is desirable to explore every other avenue before following it in any doubtful case. On the other hand, a special day school can only be regarded as a satisfactory substitute for a residential school if some of the features of the latter are introduced without undue regard for economy. Briefly stated, this means that sufficient ground must be available not only for recreation but also for instruction in outdoor manual work, of which gardening is one form.

Indoor Manual Instruction.—As regards indoor manual work, the usual practice is to devote a considerable part of the boys' time to carpentry, tailoring, shoemaking, chair-caning and other tasks commonly taught in workshops, but the value of this practical work is increased if it has some bearing on the production of something of obvious and immediate use to the community, of which the boys are units. Here again the residential school is favourably placed in that there is constant need for repairs and new equipment, and the workshop serves the double purpose of meeting these needs and providing practical instruction for the boys. I think it is desirable to find means of applying this idea to the special day school.

Similarly, in the case of the girls, practical instruction in cookery, laundry-work, general housewifery and needlework is of even greater importance than in the elementary school, and the backward mental condition of the children calls for a great increase of time devoted to such instruction. The provision of a mid-day meal in the school affords an opportunity for directing much of this domestic work along practical lines.

Hitherto, the only practicable method of providing manual and domestic instruction for the small group of children at Virgil Street has been the temporary transference of the children to the nearest training centre. In the case of mentally defective children this arrangement is undesirable. They should remain throughout the school-day under teachers accustomed to their peculiarities and limitations, and out of contact with other children whose higher educational attainments are apt to awaken their sense of inferiority. It is desirable that the facilities for practical training, which ought to form so large a part of their curriculum, should be reserved for the defective children within their own school grounds, with the proviso that they might also be made available for physically defective children if it were found convenient to have a school for such children under the same administration or on a common site.

Temporary Accommodation to relieve Virgil Street School.—An effort has been made to find temporary accommodation in one of the other Infant Departments for the overflow from Virgil Street School. It is obvious that nothing of the kind can be found which will approach the requirements of a well-organised special school. As a matter of fact, it is impossible to obtain any accommodation which offers even as good facilities for segregation as Virgil Street. Under these circumstances it seems reasonable to consider immediately whether the provision of temporary quarters, quite apart from any existing school, can be made in such a way as to form the nucleus of a permanent school for all mentally defective children.

Suggestions.—Although the above is only a rough sketch of the type of school to be aimed at, it is probably sufficient to indicate the lines on which the Committee might usefully proceed. As a temporary measure, in order to meet the immediate need for accommodation, a fairly large dwelling-house with ample grounds would suit the purpose, providing not only rooms for ordinary teaching but also for dining, cooking, laundry-work and housewifery. In the first instance it could be used for girls only, but I do not think it is desirable to segregate the sexes permanently, at least at an early age, and if sufficient ground were procured, buildings of a temporary character could be added from time to time so as to accommodate all the defective children, without encroaching unduly on the space required for outdoor instruction in such subjects as gardening.

RALPH M. F. PICKEN,

School Medical Officer.

City Hall, Cardiff.

3rd June, 1925.

APPENDIX III.

OPEN-AIR SCHOOLS.

As the Committee have reached the stage of negotiating for a site and buildings for the purpose of an open-air school, it appears desirable to record briefly the steps which have led up to the present position. The need for such schools has been repeatedly mentioned both by Dr. Walford and myself in our Annual Reports, and has been the subject of several special reports during recent years. It is important to recognise that the matter has received prolonged consideration.

Recent Reports.—On 21st December, 1923, I submitted a report on physically defective children in which I estimated the number of children so physically defective as to require education in a special school to be 500. Following upon a very full report by Mr. McHowat concerning a Conference on Special Schools held in Glasgow in October, 1924, the Director of Education and I were asked to prepare a further report on physically and mentally defective children, which we submitted on 12th December, 1924, recommending that definite proposals should be delayed until the Bute Lands Committee had completed negotiations.

In the meantime the problem of accommodating at Virgil Street all the mentally defective children who had been certified was becoming difficult, and on the instruction of the Special Schools Committee I reported on 3rd June, 1925, regarding the provision of a special day-school for mentally defective children. At a subsequent meeting held on 1st July, 1925, I was instructed to make enquiries as to the possibility of acquiring a large house on a suitable site for such a school. Since then I have visited numerous sites and properties in and around the city.

On 10th August, 1925, a letter was received from the Board of Education which may be quoted at length. Dealing with the relative advantages of two combined schools for mentally and physically defective children as against separate schools for the two types of child the Board said :—

“It would depend largely on local conditions whether this need could be best met by “establishing one large central school of each type or two schools in different parts of “the town, each divided into two departments for mentally defective and physically “defective children respectively.

“Except where very large numbers are involved, it has been found very advantageous “to establish on the same site schools for both types of child, providing, say, 100 places “for each type. The schools should be kept quite distinct, although it may be well “to construct the mentally defective school on more or less open-air lines, and it is of “course essential that a large site of several acres should be available ; but it is possible “to effect considerable economies by the provision of joint administrative premises “(kitchen, dining-room, baths, etc.) which can serve the purposes of both schools, and it “is also possible to employ a single head teacher and to utilise the services of some of “the practical instructors for both departments. If the Authority desire to proceed “with a school or schools on these lines the Board will be glad to give any further advice “or information which might be helpful or to suggest existing schools which represent “atives of the Authority might visit.”

Possible Sites.

(1) *Greenhill House.*—At a meeting of the Special Schools Committee held on 2nd September, 1925, I reported that I had certain sites and properties under consideration, and a Special Sub-Committee was appointed to visit any which might appear suitable. This Sub-Committee visited Greenhill House, Rhiwbina, on 15th October, 1925, where a house of 16 rooms with large kitchen premises, attic, bathrooms, outhouses, etc., on a site of 3½ acres sloping toward the south, is offered along with the option of a part or the whole of an additional 4 acres of land. The Sub-Committee approved of the site and property but instructed the Director of Education to ask the Board to have an inspection made if possible by one of their Medical Inspectors. I reported on 26th October to a meeting of the Special Sub-Committee that Dr. Eichholz had visited Greenhill

House and considered that it was generally suitable for the purpose, provided that the purchase price was reasonable. He expressed the view, however, that in the event of this property being purchased, the house itself should be utilised as a residential school for a certain number of children. The Sub-Committee then asked the Town Clerk to invite the District Valuer to negotiate for a price. These negotiations do not commit the Authority to purchase of the property.

(2) *Ely Housing Estate*.—It has been suggested that a suitable site might be obtained from the Housing Committee in the part of this estate which is not yet developed. A school might then be built for physically and mentally defective children unhampered by the presence of any existing buildings. The advantage of this proposal would depend on the price at which the land could be obtained. At first sight it would appear reasonable to suppose that the Housing Committee could, if they desired, part with a portion of land at a figure not exceeding their purchase price. It must be remembered, however, that the purpose at present under discussion has no relation to the development of the housing estate itself and that transfer cannot be made without the sanction of the Housing Department of the Ministry. Their approval will depend upon the decision of the District Valuer, who is likely to insist on the Housing Committee obtaining the actual site value. It is possible, therefore, that a suitable portion of land could not be obtained here at a figure which would be economical when the absence of any buildings, gardens, etc., is taken into consideration.

(3) *Caerau House*.—As the Committee are aware, this estate is already the property of the Corporation, sanction to borrow for its purchase for a smallpox hospital having been granted by the Ministry after a public enquiry. Plans and estimates for hospital buildings adapted to this site are at an advanced stage, and any alteration of the proposals could not be lightly undertaken. At the same time the site is admirably suited in many ways for a special school, and, if another piece of land could be obtained where a smallpox hospital could be more economically constructed, the possibility of transferring Caerau House should be kept in mind. Suitable land for a smallpox hospital is very difficult to obtain, and so far I have failed to find any substitute for the site at Caerau. It should also be remembered that the cost of sewers, water-supply and lighting would be more costly on this relatively isolated site.

Discussion.—In deciding immediately whether to purchase Greenhill House at the figure considered reasonable by the District Valuer, certain facts should be taken into consideration. The number of children to be accommodated in special schools is an important factor. At the present time there are in Cardiff 105 known mental defectives suitable for education in special schools, and the number is steadily growing. There are 543 children suffering from definite physical defects and suitable for education in special schools. In addition there are a considerable number of doubtful cases. I estimate that we ought ultimately to provide for 200-250 mentally defective and at least 500 physically defective children. It would be possible to find room for this number on the 7½ acres of land available, and, if it were decided to have only one special school, this property seems to be as well situated as regards access from the whole city as any other which would have the natural features desired. On the other hand, if the policy favoured by the Board were adopted, viz., the provision of smaller schools, then it would appear desirable to find sites on the east and west sides of the city, and the Ely Estate or Caerau House would ultimately serve the west side of the city well, while Greenhill House would not be specially suitable either for west or east.

On the other hand, if the Committee decide to provide for a certain number of residential places, accommodation could be found in Greenhill House for 25 to 30 children and the necessary staff with comparatively little structural alteration.

In the event of Greenhill House being purchased, right of access to the house would have to be secured through land not belonging to the Corporation; easement over this land would have to be obtained for making connection with the sewer in the public road; and some assurance would have to be obtained that the development of the surrounding land would not take place in such a way as to leave the school grounds with a long frontage of new roads on which private improvement costs would have to be paid.

In any event, whatever site is selected now or ultimately, most of the accommodation for teaching purposes will have to be erected, and it is right that the Committee should understand clearly that this will involve fairly heavy expenditure. Some guidance may be got from the proposals of Doncaster Council, involving the erection of a special day school on the most recent

lines for 240 physically and mentally defective children. We were advised by the Medical Inspector of the Board to study their plans, and these have been obtained from Doncaster by the Director of Education. Contracts have been let for £16,575, or roughly £70 per child-place. The plans indicate that each class-room will be capable of accommodating 35-40 children. These rooms are probably rather large, and it would be desirable to provide for 25-30 per class-room, although this would be more costly. If it be assumed that Cardiff should provide immediately in one school 150 places for mental defectives and 250 for physical defectives, the cost of buildings would probably run to about £30,000.

Recommendations :—

(1) If the Committee decide to provide residential accommodation on open-air lines, Greenhill House should be purchased, with an additional 4 acres of land on which buildings should be erected for the teaching of 150 mentally defective and 250 physically defective children, with provision for further extension if necessary.

(2) If it is decided to provide only for day scholars, I suggest that the principle should be adopted of providing two schools, each for 100 mentally defective and 200 physically defective children, and the possibilities of the two western sites mentioned in this report explored with the object of proceeding immediately with one of these schools.

RALPH M. F. PICKEN,

School Medical Officer.

City Hall, Cardiff.

20th November, 1925.